

What is claimed is:

1. A magnetic recording medium comprising a magnetic layer which is sectioned into a plurality of data areas and a plurality of servo areas for information recording, wherein:

5 in each of the servo areas, the magnetic layer is separated into a plurality of servo pattern unit parts forming a predetermined servo pattern and a servo pattern peripheral part/servo pattern peripheral parts surrounding the servo pattern unit parts; and

10 the servo pattern unit parts and the servo pattern peripheral part/parts are formed in different sizes so as to have different magnetic properties.

2. The magnetic recording medium according to claim 1, wherein

15 each of the servo pattern unit parts includes a set of a plurality of smaller servo pattern unit components.

3. The magnetic recording medium according to claim 1, wherein

20 each of the servo areas has only a single, integral servo pattern peripheral part.

4. The magnetic recording medium according to claim 1, wherein

25 the servo pattern peripheral part/parts includes/include a set of a plurality of servo pattern peripheral elements formed smaller than the servo pattern unit parts.

5. The magnetic recording medium according to claim 1,
wherein

the servo pattern unit parts and the servo pattern
peripheral part/parts are formed in different sizes so as to
5 have different coercivities as the magnetic properties.

6. The magnetic recording medium according to claim 2,
wherein

the servo pattern unit parts and the servo pattern
peripheral part/parts are formed in different sizes so as to
10 have different coercivities as the magnetic properties.

7. The magnetic recording medium according to claim 3,
wherein

the servo pattern unit parts and the servo pattern
peripheral part/parts are formed in different sizes so as to
15 have different coercivities as the magnetic properties.

8. The magnetic recording medium according to claim 4,
wherein

the servo pattern unit parts and the servo pattern
peripheral elements are formed in different sizes so as to
20 have different coercivities as the magnetic properties.

9. The magnetic recording medium according to claim 1,
wherein

the servo pattern unit parts and the servo pattern
peripheral part/parts are formed in different sizes so as to
25 have different magnetic anisotropies as the magnetic

properties.

10. The magnetic recording medium according to claim 1,
wherein

the servo pattern unit parts and the servo pattern
5 peripheral part/parts are formed in different sizes so as to
have different residual magnetizations as the magnetic
properties.

11. The magnetic recording medium according to claim 1,
wherein

10 in each of the data areas, the magnetic layer is
physically separated into a number of recording elements.

12. The magnetic recording medium according to claim 5,
wherein

the servo pattern unit parts and the servo pattern
15 peripheral part/parts are magnetized in opposite polarities.

13. The magnetic recording medium according to claim 6,
wherein

the servo pattern unit parts and the servo pattern
peripheral part/parts are magnetized in opposite polarities.

20 14. The magnetic recording medium according to claim 7,
wherein

the servo pattern unit parts and the servo pattern
peripheral part/parts are magnetized in opposite polarities.

25 15. The magnetic recording medium according to claim 8,
wherein

the servo pattern unit parts and the servo pattern peripheral elements are magnetized in opposite polarities.

16. A method of manufacturing a magnetic recording medium, comprising:

5 a magnetic layer forming step of forming a uniform magnetic layer on a substrate; and

 a magnetic layer processing step of separating a servo area of the magnetic layer into a plurality of servo pattern unit parts forming a predetermined servo pattern and a servo
10 pattern peripheral part/servo pattern peripheral parts surrounding the servo pattern unit parts.

17. The method of manufacturing a magnetic recording medium according to claim 16, wherein

 in the magnetic layer processing step, a data area of the
15 magnetic layer is separated into a number of recording elements while the recording elements, the servo pattern unit parts, and the servo pattern peripheral part/parts are formed at the same time.

18. The method of manufacturing a magnetic recording
20 medium according to claim 16, wherein

 in the magnetic layer processing step, the servo pattern unit parts and the servo pattern peripheral part/parts are formed in different sizes so as to have different magnetic properties.

25 19. The method of manufacturing a magnetic recording

medium according to claim 18, wherein:

in the magnetic layer processing step, the servo pattern unit parts and the servo pattern peripheral part/parts are formed in different sizes so as to have different coercivities

5 as the magnetic properties; and

the magnetic layer processing step is followed by a first direct-current magnetic field applying step of applying a uniform direct-current magnetic field higher than the coercivities of both the servo pattern unit parts and the
10 servo pattern peripheral part/parts to the magnetic layer, and a second direct-current magnetic field applying step of applying a uniform direct-current magnetic field having an intensity intermediate between the coercivity of the servo pattern unit parts and the coercivity of the servo pattern
15 peripheral part/parts to the magnetic layer in a direction opposite to that of the foregoing direct-current magnetic field.